World Trade

IN

Adding Machines • Calculators Cash Registers

1953-1959

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WORLD TRADE IN ADDING MACHINES CALCULATORS CASH REGISTERS

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William A. White, Sr., Administrator

1960

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Foreword

Global developments in the adding and calculating machines and cash registers industry since 1953 form a discernible pattern. If this pattern is to be instructive for the future, these developments must be analyzed and evaluated in terms of the supply-demand, technological, and other factors and relationships that brought them about. It is the purpose of this study to provide statistics and other data that will be of assistance in this undertaking.

The study was prepared by Charles F. Daoust and Angelina P. McEntee, under the direction of James L. Oliver, Director, Business Equipment and Service Industries Division.

William A. White, Sr.
Administrator

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World Summary

The world pattern of the adding and calculating machines and cash registers industry has undergone many changes since 1953. Production has soared, and the volume of world trade has almost doubled. New centers of production have emerged in Western Europe, Latin America, and Asia. Some of the new centers produce chiefly for local markets, but others, particularly in Western Europe, export a large share--in some cases as much as 60 percent--of their output. Intense competition has thus developed in the world export market.

The United States, long the leading world producer and supplier of these products, has been losing ground in both these respects and has become the largest importer of these products. Though still the largest producer, the United States has retained this rank by an increasingly smaller margin each year. In the export market the United States has dropped to third place, outranked by both Italy and Sweden and almost equaled by West Germany. The gap between exports and imports has steadily narrowed, and in 1959 the United States became a net importer of these products for the first time.

Despite some loss to more advanced types of office machines, the domestic market for these products remains the world's largest and in normal times has been able to absorb both a high level of domestic production and these rising imports.

The shifting of the center of international trade in these products from the United States to Europe has resulted in part from one of the most far-reaching global developments in the industry's history: the establishment by United States firms of production facilities in foreign countries. This trend is continuing, and will undoubtedly have considerable effect upon the future pattern of the industry.

This trend is not, of course, peculiar to this industry. A similar trend is evident in the closely related typewriter industry, as pointed out in a recent study, *World Trade in Typewriters, 1948-1958.*[1]

Data for the study on the United States adding and calculating machines and cash registers industry were obtained from both U. S. Government and industry sources. Data on the foreign industry are (unless otherwise shown) based on official statistics of the respective foreign governments and on information collected by the U. S. Foreign Service.

Industry Trends, 1953-58

Adding machines, calculators, and cash registers are essential to modern commerce; all businesses use them in conducting their daily transactions. Activity in the industry is thus closely tied to the gen-

[1]Available from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., or through U. S. Department of Commerce Field Offices. Price 15 cents.

eral level of economic conditions. In recent years the general level of economic conditions has been relatively high throughout the Free World. Such recessionary trends as have occurred have been of relatively short duration and have not been simultaneous on a worldwide scale.

The industrial resurgence of Europe after World War II and the rapid economic growth in both the old and new nations in Asia, Africa, and Latin America have sustained a rapidly growing demand for these products. A perhaps less known but important stimulus to this demand came both directly and indirectly from United States Government programs that required the use of these machines abroad, such as lend-lease and foreign aid activities and the deployment of military forces throughout the world. Knowledge of these machines and their superior performance was thus widely and effectively disseminated throughout the world, increasing the demand for more advanced types than were at the time available from local sources. World export trade nearly doubled during the 6-year period 1953-58, increasing from about $56 million to an estimated $100 million.

Most of the trade in these products has been between the highly industrialized nations of the world, principally Europe and North America, and the United States has been the principal supplier of these products to the world export market.

The rapid industrial recovery of Europe in the post-World War II period made this area a prime market for these products. However, foreign exchange shortages and other problems largely precluded the serving of the growing European market through exports from the United States. As the European market demand built up in the early 1950's, United States firms began to establish assembly and production plants abroad to enable them to participate in the growing markets in that area and to compete effectively with European industry in the world export market. U. S. firms have thus contributed to the rise of several European countries from small producers to important suppliers to the world export market. As a result, a major United States market has become a major producer and competitor in a short period of time.

The United States, though no longer in first place as a world supplier, is still a major exporter. The country's annual balance of trade in these products continued to be favorable until 1959, but by a smaller margin each year since 1953, because exports have been declining while imports have been increasing rapidly. Domestic manufacturers have thus encountered increased competition from European producers not only in foreign markets but also in the United States.

Adding and Calculating Machines

In 1953, the United States accounted for about 27 percent of the estimated value of world exports of adding and calculating machines, leading the 11 other major producing and exporting nations by a comfortable margin. In 1958, the United States exported only about 14 percent of the estimated world total and was outranked by both Italy and Sweden. (Figure 2.) During this period, the value of United States exports declined from about $12.5 million to about $11.2 million. (Figure 1.) Italy's exports tripled, rising from $7.2 million to $23 million, and Sweden's exports increased from $9.7 million to about $16 million.

Figure 1. World Exports of Adding and Calculating Machines by Principal Country of Origin, 1953-58

(Value in thousands of dollars)

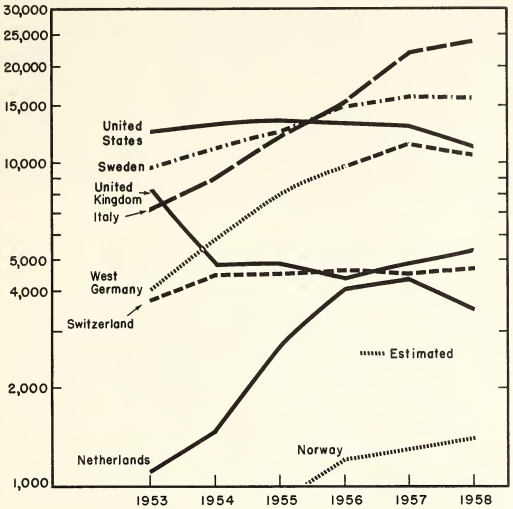
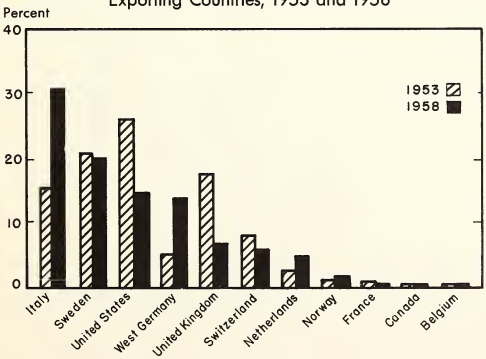


Figure 2. Percent of Estimated World Total Exports of Adding and Calculating Machines, by Principal Exporting Countries, 1953 and 1958



Cash Registers

Available data are insufficient to permit a precise determination of the volume of world trade in cash registers, but are sufficient to allow a reasonable estimate of its value and its pattern.

Only 10 countries show a consistent record of exporting cash registers, and only 6 of these show exports of significant volume. In 1953, the United States ranked first, supplying $3.4 million or about 30 percent of the estimated value of world exports of cash registers. In 1958, United States exports were somewhat higher in value than in 1953, $4.3 million, but accounted for only 20 percent of the total, placing the United States behind both Sweden and West Germany. Sweden's exports during the 6-year period increased steadily from $2.5 million to $7.9 million and about 37 percent of the estimated world total; West Germany's are estimated at about $5.1 million in 1958, or about 25 percent of the world total (figures 3 and 4).

The Outlook for the Future

There are indications that the development pattern of the industry in Europe may be followed in other areas and that production facilities will be even more dispersed geographically. This is particularly true with respect to the relatively underdeveloped regions of the world, such as Latin America and Asia, which are being reappraised as to market potential in the light of their economic progress. Faced with the same problems of foreign exchange and trade controls they met in Europe, as well as with increasing competition from European producers, United States firms have recently established new production facilities in Latin America and have announced plans to expand existing facilities or to establish new assembly or producing plants in Japan in order to strengthen their position in the Asian and Pacific area markets.

Brazil has long been an important market for these products. Recent developments, however, indicate that Brazil may become an important producer. During 1958, three major United States firms and one Italian firm completed new plants in Brazil.

In Asia, both Japan and India have developed the needed technical skills and productive capacity to become important producers of these products. Should the growth of the Asian markets continue, one or both of these countries may well become a production base in the future.

It is expected that companies not having manufacturing facilities in any of the six countries composing the European Common Market will be forced to consider carefully the advantages which might accrue to them over the next 12 to 15 years should they establish a plant in the area.

To date, most of the production of U. S. firms' overseas subsidiaries has been of the more or less standard, lower cost models. These models have found a ready market abroad. The growth of the European economy, however, has resulted in a growing demand for more efficient office equipment. Several European firms have developed highly advanced models and now produce them in quantity. Moreover, foreign market acceptance of the more sophisticated models made in the United States has been particularly notable. United States firms

Figure 3. World Exports of Cash Registers
By Principal Country of Origin, 1953-58
(Value in thousands of dollars)

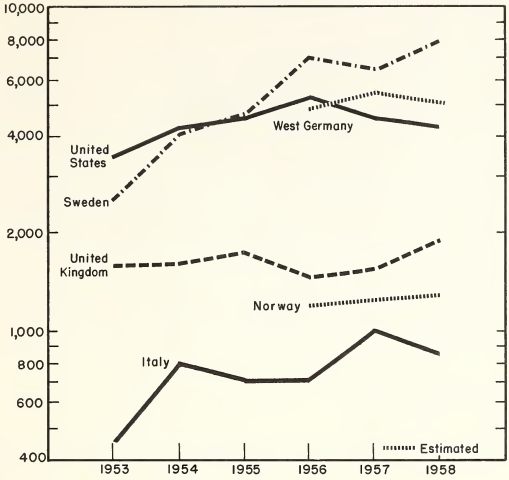
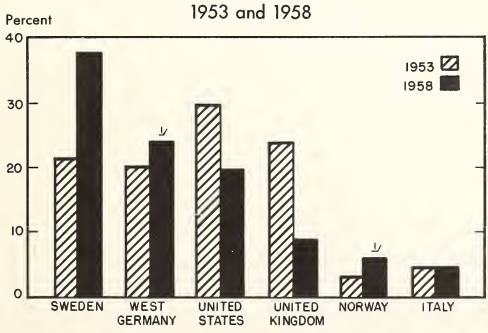


Figure 4. Percent of Estimated World Total Exports of
Cash Registers, by Principal Exporting Countries
1953 and 1958



1/ Estimated.

producing abroad are now finding it necessary to arrange for production of the more advanced machines at overseas locations in order to compete with advanced models of European firms.

Examination of recent sales trends suggests certain changes in the characteristics of the future domestic market for adding and calculating machines and cash registers. U. S. consumption has declined for the past 3 years. Both domestic production and exports have declined, while imports have increased steadily. Though these conventional products undoubtedly have been superseded to some extent by more advanced data-processing equipment, such as magnetic tape and punched cards and tape systems, rising imports indicate that the market for these conventional machines is far from saturation. The growth of this market, except for the recession year 1958, has been sufficient to sustain both a high level of domestic production and rapidly increasing imports. Moreover, the recent rapid growth of smaller businesses, particularly in the services segment of the national economy, suggests that there is a growing potential market for these relatively lower cost products that remains to be fully developed.

The United States Industry

The computing and related machines industry--of which adding machines, calculators, and cash registers are a major part--is an important segment of the United States economy. According to preliminary results of the 1958 Census of Manufactures, the industry in 1958 was composed of some 32 firms, operating 84 establishments. Currently, the industry employs about 83,000 persons in manufacturing and administration. Employment has increased at an average rate of about 10 percent annually since 1954. Many thousands more are employed in selling, servicing, and repairing the machines in sales and service establishments throughout the Nation.

The industry's annual payroll approximates half a billion dollars ($481 million) of which nearly 60 percent is paid in hourly wages. Wage rates have climbed steadily and have been consistently higher than the average wage rates in allied industries, as shown by the following figures of the Bureau of Labor Statistics, U. S. Department of Labor:

Industry	Average hourly wages			
	1956	1957	1958	1959
Computing machines and cash registers	$2.32	$2.42	$2.55	$2.68
Office and store machines	2.16	2.26	2.35	2.46
Machinery, except electric	2.21	2.30	2.38	2.50

In addition to contributing directly to the national economy through payment of wages, and indirectly by providing opportunity for many retail, wholesale, and service establishments, the computing and related products industry spends about $300 million annually for materials, containers, fuel and power, and contract work. Another $30 million to $100 million is spent annually for capital improvements--construction and new equipment.[1]

Production

United States production of adding and calculating machines and cash registers has declined in both number and value since 1953, the number of adding machines and cash registers by about 20 percent and of calculators by nearly 3 percent (table 1). Most of the U. S. production enters the domestic market. Although the proportion of U. S. production exported has remained practically constant since 1953, the volume of exports has shown a downward trend reflecting the decline in production.

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[1] Annual Survey of Manufactures, Bureau of the Census.

Table 1.--Domestic Production and Sales of Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Year	Adding machines		Calculating machines		Cash registers	
	Number	Retail value	Number	Retail value	Number	Retail value[1]
1953.....	356,193	89,733	99,717	60,898	101,477	81,000- 91,000
1954.....	287,161	[2] 81,000	94,206	[2] 65,500	109,865	88,000- 99,000
1955.....	336,251	89,970	118,675	74,392	116,857	93,000-105,000
1956.....	345,080	94,193	130,914	83,246	102,559	82,000- 92,000
1957.....	338,917	92,207	124,419	84,180	87,841	70,000- 79,000
1958.....	286,777	67,188	96,971	66,611	81,621	65,000- 75,000

[1] Estimated; actual value not reported.

[2] List price value estimated for 1954 on basis of f.o.b. value, which was $48,463,000 for adding machines and $39,326,000 for calculators.

Source: *Facts for Industry*, Series M35R, Bureau of the Census.

Trends in the retail sales value of domestic factory shipments of these products since 1953 are mixed. Adding machine sales value reached a high of $94 million in 1956, but fell to $67 million in 1958. Calculating machine sales value rose steadily to a high of $84 million in 1957, but dropped to about $67 million in 1958. The sales value of domestic shipments of cash registers is not reported. However, the number of cash registers shipped during 1953-58 averaged about 100,000 units annually, reaching a high of 116,857 units in 1955 and then declining rapidly to 81,621 units in 1958. On the basis that the average retail value of a new U. S. cash register is $800 to $900, domestic cash register sales during 1953-58 may be estimated at $80 to $90 million annually. For comparison, sales of cash registers in 1958 alone would be estimated at $65 to $75 million on the same basis.

The sharp drop in sales of these products in 1958 reflects their sensitivity to the level of business activity. Through the first half of 1958 the general economy was in a marked recessionary trend. As in the general economy, an upturn in activity in these products became evident in the third quarter, equaling or surpassing the previous year's sales for the comparable period. This upturn continued into 1959, the first quarter combined sales estimates of these products showing an increase of about 7 percent over 1958 sales estimates.[2]

Exports

The United States has lost its position as the leading exporter of adding and calculating machines and cash registers. While European exports have greatly increased since 1953, U. S. exports showed a slight downward trend throughout most of the period, until 1958, when they took a sharp drop--about 12 percent. This was the first marked reduction and may have signaled the beginning of a rapidly declining trend. Exports for 1959 showed a further decline of 2.5 percent.

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[2] Sales estimates based on industry sources.

Table 2.—U. S. Exports of Adding and Calculating Machines and Cash Registers and Parts, 1953-59

(Value in thousands of dollars)

Item	1953		1954		1955	
	Units	Value	Units	Value	Units	Value
Adding machines:						
Listing	34,499	5,300	39,853	6,040	32,422	5,370
Nonlisting and printing calculators	[1]2,719	[1]583	[1]2,707	[1]639	[1]6,915	[1]1,228
Parts, listing-adding	.....	n.a.	.....	n.a.	.....	n.a.
Calculators:						
Nonlisting	20,496	7,227	20,086	7,047	22,572	8,346
Printing	([1])	([1])	([1])	([1])	([1])	([1])
Cash registers:						
New	10,200	3,039	10,461	3,844	13,091	4,175
Used and rebuilt	3,897	438	4,131	391	3,199	342
Parts	.....	3,259	.....	3,755	.....	4,041
Total	71,811	19,846	77,238	21,716	78,199	23,502

Item	1956		1957	
	Units	Value	Units	Value
Adding machines:				
Listing	28,193	4,825	34,922	5,564
Nonlisting and printing calculators	6,781	1,120	9,070	1,966
Parts, listing-adding	.....	n.a.	.....	n.a.
Calculators:				
Nonlisting	23,176	8,532	18,958	7,486
Printing	([1])	([1])	([1])	([1])
Cash registers:				
New	15,573	4,931	14,904	4,222
Used and rebuilt	3,980	419	3,996	397
Parts	.....	3,688	.....	3,783
Total	77,703	23,515	81,850	23,418

Item	1958		1959	
	Units	Value	Units	Value
Adding machines:				
Listing	30,468	4,496	31,546	3,938
Nonlisting and printing calculators	n.a.	n.a.	n.a.	n.a.
Parts, listing-adding	.....	[2]5,938	.....	[2]5,418
Calculators:				
Nonlisting	12,905	5,269	13,506	5,860
Printing	5,780	1,461	7,110	1,591
Cash registers:				
New	11,835	3,890	10,374	3,425
Used and rebuilt	3,176	361	2,985	536
Parts	.....	5,043	.....	4,658
Total	64,164	[2]20,520	65,521	[2]20,008

n.a.—Not available. [1]Printing calculators included with nonlisting adding machines classification, 1953-57. [2]Adding machine parts data not available before 1958. Totals for 1958 and 1959 exclude value of adding machine parts to maintain comparability with previous years.

Source: *U. S. Exports of Domestic and Foreign Merchandise*, Report FT 410, Pt. 2, Bureau of the Census.

United States exports of parts, unlike those of complete machines, have shown a rising trend. Unfortunately, data on exports of adding machine parts prior to 1958 and on calculating machine parts are not available. It is reasonable to assume, however, that they have followed a trend similar to that of exports of cash register parts, which increased from $3 million in 1953 to $5 million in 1958. In 1958, exports of both adding machine and cash register parts surpassed in value the exports of complete machines (table 2). Parts may thus have become more important as an export commodity than complete machines.

Distribution of U. S. exports.—The U. S. export pattern of these products has not changed greatly; the major U. S. world markets were the same in 1958 as in 1953. In terms of total trade, Europe is still the major U. S. export market, followed closely by Canada, Central America, and South America. Generally, however, the U. S. has lost some trade with the major markets of Europe, Canada, and Central and South America while registering comparatively slight gains in other areas. (Table 3.)

Table 3.--Distribution of U. S. Exports of Adding and Calculating Machines and Cash Registers by Major World Regions, 1953 and 1958

(Percent of total value)

Year	Canada and North America	Central America	South America	Europe	Asia	Australia and Oceania	Africa	Undistributed
Listing adding machines								
1953....	10.1	23.4	25.4	22.2	8.4	5.2	5.2	0.07
1958....	11.7	21.4	29.5	20.0	13.0	3.0	1.1	.....
Nonlisting adders and printing calculators								
1953....	8.4	12.7	28.9	30.4	8.8	.....	9.7	1.2
1958....	8.4	7.5	13.9	63.9	3.8	.....	2.1	.....
Calculators (nonlist)								
1953....	17.3	11.7	8.2	46.4	11.0	2.4	2.9	0.05
1958....	15.4	18.0	12.2	27.9	16.2	5.3	3.0	.....
Cash registers (new)								
1953....	9.3	22.8	19.8	32.6	4.7	4.3	6.4	0.2
1958....	7.5	24.3	13.1	15.2	23.6	6.4	9.8	.....
Cash registers (used and rebuilt)								
1953....	22.1	34.3	13.1	13.6	14.6	.....	0.1	0.1
1958....	25.0	39.7	10.4	19.8	4.7	.....	0.4	.....
Cash register parts								
1953....	50.3	1.0	2.3	32.3	12.8	0.4	0.5	0.2
1958....	41.6	1.1	5.0	42.8	7.4	1.8	0.2	.....

Note: Percentage totals do not always equal 100 because of rounding.

Source: Computed from *U. S. Exports of Domestic and Foreign Merchandise*, Report No. FT 410, Part 2, Bureau of the Census.

In terms of individual products, the U. S. export market has changed. South America (in both 1953 and 1958) took the largest share of U. S. adding machine exports, and Europe was the largest consumer of calculators. Central America was the largest consumer of both new and used cash registers in 1958, replacing Europe in the first category. Europe in turn in 1958 had displaced Canada as the largest importer of U. S. cash register parts. Europe accounted for an increasing proportion of U. S. exports of printing calculators, used and rebuilt cash registers, and cash register parts, but a rapidly decreasing share of exports of nonlisting calculators and new cash registers. In exports to Canada and Central and South America, increases in some products were offset by decreases in others, but the overall proportions were for the most part unchanged.

The United States made significant gains in exports to Asia, particularly to Japan and the Philippines, in the 1953-58 period. Asia took nearly a fourth of U. S. exports of cash registers in 1958 compared to about one-twentieth in 1953. Small increases in exports to Australia, Oceania, and Africa of calculators and cash registers were largely offset by decreases in exports of new adding machines, used machines, and parts.

U. S. Firms Abroad

Several factors indicate that a further decline in U. S. exports of these products may be expected. First is the rapid growth of the European industry and the resultant heightened competition for world markets. Second is the trend for U. S. manufacturers of these products to locate new plants overseas. Marketing considerations in Europe, as well as tight trade and foreign exchange controls in other areas, are important factors influencing this trend. Economic arrangements such as apply to the European Common Market, other proposed free trade areas, and the Commonwealth countries, offer tariff and currency convertibility incentives as well as the promise of growing, protected markets. These factors bear heavily on the decisions of U. S. manufacturers as to whether to export from the U. S. or to manufacture abroad.

Other factors are the generally lower production costs prevailing overseas and the industrial development programs of many countries which offer special inducements, such as low factory rents and tax advantages, to manufacturers locating a new plant in their country.[3]

While no longer the leading exporter of adding and calculating machines and cash registers, the United States is still an important factor

[3] A recent study by the National Industrial Conference Board, *Production Costs Here and Abroad*, Studies in Business Economics No. 61, National Industrial Conference Board, Inc., New York 22, attests to the attractiveness of European sites. This study, based on 192 replies to questionnaires sent to 500 U. S. firms, reveals a distinct pattern of lower production costs in Europe as compared with costs in the U. S. In about 80 percent of the replies, unit production costs in Europe were from 55 percent to 85 percent of the cost of producing the same product in the U. S.

in world trade. U. S. firms have placed added emphasis on expanding their foreign trade, and all of the leading manufacturers of these products recently have strengthened their foreign marketing organizations by establishing new sales and service establishments in all major regions of the world. The larger firms have also established or acquired new production facilities in one or more foreign countries. Since 1953, seven of the larger firms have established one or more new plants in Europe, Latin America, or Asia. Two firms have new plants in all three of these major world regions.

The effects of locating these plants overseas have been widespread. The foreign sales resulting from greater accessibility to foreign markets have usually been several times greater than the previous volume of exports of the same firms from the U. S. More than half the output of the overseas plants in Europe is exported, thereby contributing to the rise of several European countries to importance in world trade in these products. Also, U. S. firms have found that lower overseas production costs make it possible for them to ship products from foreign plants to the U. S. market at competitive prices, thereby strengthening their competitive position in the domestic market in some lower priced product lines. Statistical data on the volume of these imports are not available, but at present it is relatively small and is confined to only a few models.

Overseas production has stimulated a general upgrading of foreign markets. Previously, foreign market acceptance of new models generally lagged several years behind their introduction in the U. S. New models are now generally introduced at the same time both here and abroad.

Before the advent of lend-lease programs and World War II, knowledge of modern U. S. business machines and equipment was generally lacking throughout most of the world. Foreign production was limited and the U. S. was the source of machines in quantity. The lend-lease programs and subsequent expeditionary forces of the U. S. effectively scattered U. S. business equipment around the globe and introduced modern methods of handling complex business transactions. Much of this equipment acquired by foreign countries continued in use after the war and some is still in use, even though clearly obsolete. In the postwar period, as more-advanced machines were developed in the U. S., many of the superseded models were shipped abroad to replace the obsolete machines in use, and gradual upgrading of the foreign markets thus became established.

During the boom years of the early and middle 1950's, foreign demand rapidly narrowed the time lag insofar as introduction of new models abroad was concerned. More recently, establishment of U. S. plants overseas and added emphasis on developing foreign markets have reduced the time lag to almost zero.

Imports

While United States exports of adding and calculating machines and cash registers have been declining, imports have been increasing steadily and have more than doubled in volume. The U. S. is now the world's leading importer of these products, and, in 1959, imports

exceeded exports in value, making the U. S. a net importer of these products.

Data on adding machines imports in 1953 are not available, but based on the trend during 1954-58, they probably totaled about $2 million in value. Total imports of the three types of machines under study may therefore be estimated at about $6.9 million in 1953, compared to $25.9 million in 1959 (table 4).

Table 4.--U. S. Imports of Adding and Calculating Machines and Cash Registers and Parts, 1953-59

(Value in thousands of dollars)

Item	1953	1954	1955	1956	1957	1958	1959
Adding machines.....	[1] 2,000	2,329	3,519	5,353	5,745	6,014	10,596
Calculating machines...	3,363	2,708	3,138	5,808	5,814	5,840	9,098
Cash registers and parts.....	1,591	1,478	2,323	2,476	3,280	3,608	6,203
Total.....	[1] 6,954	6,515	8,980	13,637	14,839	15,462	25,897

[1] Estimate.

Source: *U. S. Imports of Merchandise for Consumption*, Report FT 110, Bureau of the Census.

Although data limitations permit only an estimate of total domestic consumption of these products, it is clear that imports have accounted for an increasing share. The proportion of estimated consumption of adding machines met by imports has nearly tripled and that of calculators and cash registers has nearly doubled since 1952 (table 5).

Table 5.—Imports as a Percent of Estimated Consumption, 1953-58

(Value in thousands of dollars)

Year	Adding machines			Calculators			Cash registers		
	Consumption	Imports	Percent	Consumption	Imports	Percent	Consumption	Imports	Percent
1953..	n.a.	n.a.	.....	40,510	3,363	8.3	43,113	1,591	3.7
1954..	44,752	2,329	5.2	34,987	2,708	7.7	45,993	1,478	3.2
1955..	55,536	3,519	6.3	42,430	3,138	7.4	54,356	2,323	4.3
1956..	60,370	5,353	8.9	53,700	5,808	10.8	61,475	2,476	4.0
1957..	55,784	5,745	10.3	56,682	5,814	10.3	59,761	3,280	5.5
1958..	43,023	6,014	14.0	46,545	5,840	12.5	55,256	3,607	6.5

n.a.—Not available.

Note: Dollar values are f.o.b. and declared value. Consumption estimates assumed equal to shipments minus exports, plus imports.

Source: Computed from *Facts for Industry* Series M35C, *U. S. Exports of Domestic and Foreign Merchandise*, Report FT 410, Pt. 2, and *U. S. Imports of Merchandise for Consumption*, Report No. FT 110, Bureau of the Census.

Adding Machines

U. S. imports of adding machines have tripled since 1953. West Germany, Sweden, and Italy are the principal suppliers. In 1954, these three countries supplied about 85 percent of all imports of electric and about 43 percent of nonelectric adding machines. They have steadily increased their combined share of the U. S. import trade, in 1958 supplying about 94 percent of electric and 75 percent of nonelectric adder imports.

West Germany has clearly dominated the U. S. import trade since 1953, although Italy has made by far the most significant gains. Sweden has lost trade relative to Germany and Italy, though imports of electric adders from Sweden have doubled since 1954. Other countries that regularly share in the U. S. import trade are Canada, Switzerland, United Kingdom, Norway, and Denmark. Occasional imports come from France, Belgium, Netherlands, East Germany, and Japan.

The imports from Sweden, Switzerland, Norway, and Denmark are foreign model machines. Some of the imports from Germany, Italy, the United Kingdom, and the Netherlands are U. S. models made abroad and imported by U. S. firms for the domestic market.

Table 6.--U. S. Imports of Adding Machines and Parts by Country of Origin, 1954-59

(Value in thousands of dollars)

Country of origin	1954	1955	1956	1957	1958	1959
Electric motor:						
West Germany	863	1,368	1,997	2,121	2,305	2,582
Sweden	792	1,263	1,706	2,065	1,586	2,475
Italy	33	234	620	702	1,082	2,858
Switzerland	20	130	339	194	158	508
United Kingdom	144	78	45	30	137	1,051
Subtotal	1,852	3,073	4,707	5,112	5,268	9,474
Other countries	138	79	67	61	22	89
Total	1,990	3,152	4,774	5,173	5,290	9,563
Nonelectric:						
West Germany	28	68	68	147	343	553
Sweden	119	40	79	40	38	52
Italy	.....	.....	112	241	165	132
Norway	3	22	75	62	75	72
United Kingdom	31	104	25	29	67	140
Denmark	4	1	6	45	16	.....
Switzerland	23	79	161	3	5	.....
Subtotal	208	314	526	567	709	949
Other countries	130	53	53	5	15	83
Total	338	367	579	572	724	1,032

Source: *U. S. Imports of Merchandise for Consumption*, Report No. FT 110, Bureau of the Census.

Calculators

Imports of calculators have more than doubled since 1953, increasing from $3.3 million in 1953 to $5.8 million in 1958 and to $9.1 million in 1959. Italy, the Netherlands, and the United Kingdom supply

more than 80 percent of the imports of calculators, Italy alone supplying well over one-half of the total. West Germany until 1958 was not an important factor in the U. S. market, but in that year supplied 9 percent of the total, compared to about 1 percent in 1957. Italy continued to gain in 1959, supplying about 65 percent of the total imports, while Germany supplied only 2 percent of the total.

Sweden has been an important supplier of calculators to the U. S. but has lost trade relative to other countries, even though imports from Sweden have doubled since 1953. The relative decline of Sweden in U. S. import trade exemplifies the rapid growth of the U. S. domestic market and the rise of extremely competitive market conditions; a doubling of sales has still resulted in a declining share of the available market.

Table 7.--U. S. Imports of Calculating Machines and Parts by Country of Origin, 1953-59

(Value in thousands of dollars)

Country of origin	1953	1954	1955	1956	1957	1958	1959
Italy	1,927	1,725	1,814	2,695	3,081	3,170	5,908
Netherlands	335	75	227	842	1,374	954	1,498
United Kingdom	635	605	215	208	458	738	917
West Germany	111	20	15	180	80	527	248
Sweden	144	192	247	256	373	295	201
France	.....	3	521	608	289	32	17
Switzerland	172	48	67	20	73	18	60
Canada	27	30	25	982	24	11	29
Subtotal	3,351	2,698	3,131	5,791	5,752	5,745	8,878
Other countries	12	10	7	17	62	95	220
Total	3,363	2,708	3,138	5,808	5,814	5,840	9,098

Source: *U. S. Imports of Merchandise for Consumption*, Report No. FT 110, Bureau of the Census.

Cash Registers

U. S. imports of cash registers and parts have almost quadrupled in value since 1953, increasing from $1.6 million in 1953 to $6.2 million in 1959. Sweden, West Germany, the United Kingdom, and Norway supplied practically all of these imports, Sweden alone accounting for from 60 percent to 90 percent of the annual total. West Germany made the greatest gains in cash registers, largely at the expense of the United Kingdom. In 1953, Germany supplied less than 1 percent, the U. K. about 34 percent; in 1958, Germany supplied 32 percent, the U. K. only 3 percent. Norway has lost trade relative to the other countries, its 1958 share being only about half that of 1953 even though having approximately the same value.

Table 8.--U. S. Imports of Cash Registers and Parts by Country of Origin, 1953-59

(Value in thousands of dollars)

Country of origin	1953	1954	1955	1956	1957	1958	1959
Sweden	933	1,397	1,871	2,319	2,437	2,144	3,849
West Germany	9	7	380	88	441	1,171	2,100
United Kingdom	540	8	.....	.....	307	132	63
Norway	105	46	66	57	81	115	115
Subtotal	1,587	1,458	2,317	2,464	3,266	3,562	6,127
Other countries	4	20	6	12	14	46	46
Total	1,591	1,478	2,323	2,476	3,280	3,608	6,173

Source: *U. S. Imports of Merchandise for Consumption*, Report FT 110, Bureau of the Census.

The Industry Abroad

European countries now dominate international trade in adding and calculating machines and cash registers. Despite this fact and the fact that European production has increased phenomenally, Europe is still the major market for United States exports of these products.

Italy

Italy, now the leading exporter of adding and calculating machines, in 1953 ranked fourth after the United States, Sweden, and the United Kingdom. Since that time Italy's production has nearly tripled, exports have more than tripled, and the country's share of estimated world total exports has almost doubled, rising from 16 percent in 1953 to 30 percent in 1958. Europe is Italy's largest export market for these machines, taking about 50 percent of the total. The United States and Mexico are also major export markets. The U. S. takes about 10 percent of the adding machines and about 25 percent of the calculators, Mexico about 8 percent and 6 percent respectively, of Italy's total exports of these products.

Although Italy doubled both production and exports of cash registers during 1953-58, the country dropped from fifth place to sixth in these

Italy: Production and Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953		1954		1955	
	Units	Value	Units	Value	Units	Value
Adding machines:						
Production	(1)	.....	(1)	.....	(1)	.....
Exports	8,290	1,212	10,989	1,233	20,144	2,133
Imports	2,432	358	1,290	234	1,987	348
Calculators:						
Production, total	[2]82,737	.....	[2]101,800	.....	[2]132,651	.....
Printing	66,494	.....	89,480	.....	121,874	.....
Nonprinting	16,243	.....	12,320	.....	10,777	.....
Exports, total	30,621	6,046	40,216	7,775	55,066	10,121
Printing	24,009	5,145	32,012	6,694	45,664	8,845
Nonprinting	6,612	901	8,204	1,081	9,402	1,276
Imports, total	8,673	3,215	6,256	2,542	6,892	3,257
Printing	3,741	2,132	2,127	1,508	2,638	2,167
Nonprinting	4,932	1,083	4,129	1,034	4,254	1,090
Cash registers:						
Production index	100	.....	152	.....	187.4	.....
Exports	1,953	455	3,783	797	4,480	687
Imports	664	182	648	206	1,070	343

See footnotes at end of table.

Italy: Production and Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-58—Con.

(Value in thousands of dollars)

Item	1956		1957		1958	
	Units	Value	Units	Value	Units	Value
Adding machines:						
Production	(1)	.....	(1)	.....	(1)	.....
Exports	24,397	2,590	30,551	4,050	42,493	5,660
Imports	1,980	419	.....	598	2,431	521
Calculators:						
Production, total	[2]141,902	.....	[2]193,154	.....	[2]230,689	.....
Printing	132,970	.....	183,877	.....	.....	.....
Nonprinting	8,932	.....	9,387	.....	.....	.....
Exports, total	62,606	12,429	85,266	18,102	88,522	18,202
Printing	54,707	11,309	76,741	17,102	81,437	17,293
Nonprinting	7,899	1,120	8,525	1,000	7,085	909
Imports, total	6,195	2,464	2,735	2,842	4,804	1,801
Printing	2,183	1,413	2,534	1,748	1,123	1,156
Nonprinting	4,012	1,051	201	1,094	3,681	645
Cash registers:						
Production index	147.9	.....	201.0	.....	208.5	.....
Exports	3,675	695	4,804	1,018	5,627	865
Imports	1,273	332	1,063	422	1,187	388

[1]Included with calculators. [2]Includes adding machines.

exports, and in 1958 supplied only about 4 percent of the estimated world total.

Available information shows that there are at least 10 manufacturers of adding and calculating machines and cash registers in Italy. Two are subsidiaries of U. S. firms.

Sweden

Sweden in 1958 ranked second to Italy as an exporter of adding and calculating machines but supplied only about 20 percent of the estimated world total, the same as in 1953, despite an increase from $9.7 million to about $16 million. Europe, the major market, took about 53 percent of Sweden's exports of these products; West Germany was the best customer, taking about 18 percent of the total. The U. S. is a growing market, rising to about 15 percent of Sweden's exports of these products in 1957 compared to 10 percent in 1953.

Sweden is now the leading exporter of cash registers, rising from third place after Germany and the United States. By 1958, Sweden's exports of cash registers had tripled, and the country's share of the estimated world total exports had climbed from about 22 percent to nearly 40 percent. About 45 percent of Sweden's exports of cash registers go to Europe, the United Kingdom taking about 19 percent and West Germany and Denmark about 4 percent each. The United States is the best single market, taking about 34 percent of the total in 1957. Canada and Brazil are also important markets, taking 7 percent and 5 percent, respectively, of Sweden's total exports of cash registers in 1957.

Latest sources show six Swedish firms producing either adding and calculating machines or cash registers. Two of the larger firms have announced plans to expand existing production facilities, and a third firm was recently acquired by a United States corporation.

Sweden: Production and Foreign Trade, Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

	1953	1954	1955	1956	1957	1958
Production:						
All office machines	20,956	25,271	29,946	35,598	41,500	n.a.
Adding, calculating machines, typewriters and cash registers, complete	17,123	20,257	23,942	27,970	31,600	n.a.
Exports:						
Adding and calculating machines	9,698	11,249	12,526	15,136	16,024	15,157
Cash registers	2,531	4,120	4,649	6,970	6,415	7,947
Imports:						
Adding and calculating machines	254	282	426	372	590	612
Cash registers	430	400	697	464	545	675

n.a. -- Not available.

West Germany

West Germany is a major producer and supplier of adding and calculating machines and cash registers. Unfortunately, complete statistics on Germany's world trade in these products are not available. Exports prior to 1956 can only be estimated by interpolation from the fragmentary data available and the subsequent trend.

In 1956, Germany ranked fourth in exports of adding and calculating machines, after Italy, Sweden, and the U. S., and supplied about 14 percent of the estimated world total. In 1958, Germany's world market position remained the same, although exports had increased to about $10.7 million from about $9.8 million.

The United States has become the best market for German adding machines, taking nearly 42 percent of total exports in 1958. Europe imported about 27 percent, France receiving 8 percent to become the second largest foreign market in 1958.

France was Germany's best market for calculating machines in 1958, taking 18 percent of the export total. The United States took about 14 percent, and Europe, including France, imported about 49 percent of the total.

German production of cash registers has increased substantially since 1954, the output value rising from $11.6 million to about $20.1 million in 1958. Exports of cash registers are not shown separately for those years, but statistics for 1950 and 1951 show exports of cash registers totaling $988,000 and $3.9 million, respectively. A crude estimate of later exports may be obtained from the import data of other countries. Import figures of Italy, Switzerland, Sweden, Norway,

France, Denmark, United Kingdom, Netherlands, and the United States, which together receive more than 60 percent of the estimated world total imports of cash registers, show a steady increase of imports from West Germany during the period 1953-58. These countries imported from Germany the following amount of cash registers and parts: 1953, $1.4 million; 1954, $1.5 million; 1955, $3.3 million; 1956, $2.9 million; 1957, $3.4 million; 1958, $3.1 million. On this basis, total German exports of cash registers in 1953 may be estimated at about $2.3 million, or about one-fifth of the world export trade, giving Germany third place after the United States and Sweden in volume of exports. On the same basis, Germany's 1958 exports of cash registers may be estimated at about $5.1 million, or about 24 percent of the world total, placing Germany second only to Sweden. The United States in 1958 took about $1.1 million, or about 20 percent, of Germany's estimated export trade in cash registers.

Latest information sources show 25 firms manufacturing adding and calculating machines and cash registers in Germany, 4 of them being subsidiaries of U. S. manufacturers of these products.

Germany: Production and Foreign Trade, Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953		1954		1955	
	Units	Value	Units	Value	Units	Value
Adding machines:						
Exports	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Imports	30,959	7,616	31,401	8,254	24,098	3,853
Calculators:						
Production	87,730	11,611	123,079	13,281	144,291	16,512
Exports	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Imports	n.a.	n.a.	n.a.	n.a.	14,363	2,619
Cash registers:[1]						
Production	n.a.	n.a.	27,152	11,617	37,318	15,188

Item	1956		1957		1958	
	Units	Value	Units	Value	Units	Value
Adding machines:						
Exports	55,100	6,378	65,012	7,818	[2]518,735	6,549
Imports	23,996	4,801	28,000	4,952	32,011	3,131
Calculators:						
Production	168,889	19,224	176,820	22,430	198,383	22,600
Exports	25,230	3,475	22,420	3,805	24,603	4,186
Imports	11,746	2,296	18,900	3,938	28,749	4,856
Cash registers:[1]						
Production	35,823	15,912	35,378	16,289	39,251	20,117

n.a.—Not available.

[1]Import and export statistics in cash registers are not shown separately but are included in statistics for bookkeeping and accounting and punch card machines.

[2]Includes a large number of stylus-operated, pocket-type devices not previously recorded in this category.

United Kingdom

The United Kingdom, though still a major producer and supplier of adding and calculating machines and cash registers, has suffered a decline in the world export market both percentagewise and in export volume.

In 1953, the U. K. ranked third in exports of adding and calculating machines, shipping about $8.3 million, nearly 18 percent of the estimated world export total. By 1958, the country's exports had declined to $5.4 million, about 7 percent of the estimated world total, and the U. K. had dropped to fifth place. British Commonwealth countries are the U. K.'s largest market for exports of adding and calculating machines, taking about 52 percent of the total in 1957. European countries took 20 percent and the U. S. about 15 percent.

Although U. K.'s exports of cash registers increased slightly between 1953 and 1958, its share of the estimated world total declined from 14 percent to 9 percent and the U. K. dropped from second place to fourth among the exporting nations. The Commonwealth countries are the U. K.'s best market for cash registers, taking about 74 percent of the total exported from U. K. in 1957. The United States is also a major market, importing about 20 percent of the total.

United Kingdom: Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953		1954		1955	
	Units	Value	Units	Value	Units	Value
Production (all office machines)	.....	82,426	.....	98,358	.....	109,474
Adding machines:						
Exports[1]	27,236	8,298	24,959	4,913	25,176	4,887
Imports	2,982	321	7,583	501	10,173	885
Calculators:[2]						
Imports	3,936	943	5,046	1,252	8,790	2,006
Cash registers:						
Exports	9,505	1,605	7,585	1,622	8,084	1,766
Imports	1,716	572	2,678	979	3,915	1,632

Item	1956		1957		1958	
	Units	Value	Units	Value	Units	Value
Production (all office machines)	.....	126,232	.....	136,349	.....	145,051
Adding machines:						
Exports[1]	24,256	4,539	25,948	4,940	.....	5,407
Imports	9,691	817	15,063	1,201	.....	.....
Calculators:						
Imports	7,849	1,861	9,333	813	.....	2,013
Cash registers:						
Exports	5,541	1,485	8,082	1,559	.....	1,906
Imports	6,770	2,412	9,668	2,878	.....	3,997

[1]Includes calculators.
[2]Exports included with adding machines.

At least 10 companies are manufacturing standard-type adding and calculating machines and cash registers in the United Kingdom. Five are reportedly subsidiaries of U. S. firms and one is a subsidiary of an Italian firm.

Switzerland

Though Switzerland's exports of adding and calculating machines increased by about 25 percent during the period 1953-58, the country dropped from fifth place to sixth and also lost part of its share of the world total, receiving 6 percent in 1958 compared with 8 percent in 1953. Europe is the chief market for Switzerland's exports of adders and calculators, taking 64 percent of the total in 1958, and West Germany is the largest single market, receiving about 27 percent of the total. The U. S. imported about 9 percent.

Data on Switzerland's exports of cash registers are not available. In the country's official trade statistics cash registers are combined with bookkeeping machines and parts. Exports in this combined classification have tripled since 1953, rising from $586,000 to $1.8 million in 1958. Since three firms produce cash registers in Switzerland and three firms produce bookkeeping machines, it may be assumed that a substantial proportion of the total value of exports in this classification represents cash register exports.

At least 12 firms are reported to be producing either adding machines, calculators, or cash registers in Switzerland. One is a subsidiary of a major U. S. firm.

Switzerland: Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953	1954	1955	1956	1957	1958
Adding and calculating machines:						
Exports, total	3,810	4,525	4,557	4,683	4,550	4,737
26 lbs. or less	2,548	2,886	2,971	2,212	1,704	1,674
26 lbs. to 44 lbs	1,177	1,356	1,349	2,398	2,692	2,474
44 lbs. to 220 lbs.	81	86	84	52	21	142
220 lbs. or over	4	197	153	21	133	447
Imports, total	2,079	2,185	2,645	2,772	4,249	4,228
26 lbs. or less	471	553	597	516	645	745
26 lbs. to 44 lbs	722	595	927	1,017	1,524	1,086
44 lbs. to 220 lbs.	313	283	380	411	691	420
220 lbs. or over	573	754	741	828	1,389	1,977
Cash registers (includes bookkeeping machines):						
Exports	586	861	1,145	1,487	1,498	1,799
Imports	1,372	1,461	2,070	2,034	1,986	2,249

The Netherlands

The Netherlands ranked seventh in volume of exports of adding and calculating machines in both 1953 and 1958, although during that time

the country's exports tripled and its share of world trade in these products rose from about 2 percent to about 4.5 percent. Calculator exports comprise the bulk of the trade in these products, about 88 percent of the value in 1958; adding machines represented 12 percent. Europe is the country's best market for calculators, taking about 55 percent of the exports in 1958. France and Germany accounted for 20 percent and 12 percent respectively, of the total; the United States received about 18 percent. Europe is also the best market for Netherlands adding machines, accounting for about 56 percent of the total in 1958.

Though the Netherlands produces a substantial number of cash registers, imports of these machines are usually several times greater than exports. Production has declined slightly--from 9,636 units valued at $1.5 million in 1953 to 8,295 units valued at $1.3 million in 1958--while imports have doubled--$400,000 in 1953; $1.0 million in 1958. Exports, never large, have dropped sharply from $64,000 to $21,000.

Information currently available shows eight firms in the Netherlands manufacturing these products, three of which are subsidiaries of U. S. firms.

Netherlands: Production and Foreign Trade, Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953		1954		1955	
	Units	Value	Units	Value	Units	Value
Production (all office machines)	33,868	3,183	52,849	4,492	85,312	9,978
Adding machines:						
Exports	2,107	332	3,393	505	3,737	558
Imports	7,400	1,017	11,742	1,271	15,604	1,401
Calculators:						
Exports	2,986	786	5,613	989	10,596	2,145
Imports	3,516	523	5,476	745	7,714	1,566
Cash registers:						
Production	9,636	1,507	9,900	1,672	9,292	1,417
Exports	248	64	12	4	303	41
Imports	1,839	473	2,172	524	3,491	849

Item	1956		1957		1958	
	Units	Value	Units	Value	Units	Value
Production (all office machines)	139,508	14,002	168,009	15,684	n.a.	n.a.
Adding machines:						
Exports	3,847	552	3,781	568	2,828	430
Imports	16,551	1,527	15,731	1,699	22,027	1,204
Calculators:						
Exports	13,326	3,507	19,914	3,846	15,209	3,137
Imports	8,257	1,192	10,281	1,609	4,820	1,099
Cash registers:						
Production	7,281	1,182	8,295	1,322	.....	.....
Exports	109	16	98	20	65	21
Imports	3,689	994	3,674	1,157	3,411	1,058

n.a.--Not available.

Norway

Though not a major producer, Norway has doubled its production of adding and calculating machines and cash registers. Total production of office machines rose from about $1.9 million in 1953 to $3.7 million in 1956, practically all of which was accounted for by adding machines and cash registers.

Norway's exports of these products totaled $2.5 million in 1957, of which about 77 percent went to Europe and about 6 percent to the United States. The U. S. imports were about 50 percent adding machines and 50 percent cash registers.

Norway: Production and Foreign Trade in Office Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953	1954	1955	1956	1957	1958
All office machines:						
Production	1,897	2,328	2,999	3,671	n.a.	n.a.
Exports	929	1,397	1,783	2,523	2,513	n.a.
Imports	1,003	1,156	805	1,089	1,453	1,370
Cash registers:						
Imports	319	240	297	320	509	498

n.a. --Not available.

France

France is not an important exporter of these products. Exports of adding and calculating machines rose slightly from $492,000 in 1953 to

France: Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953	1954	1955	1956	1957	1958
Adding machines:						
Exports, total	299	197	354			
Listing	282	190	343			
Nonlisting	17	7	11	[1]	[1]	[1]
Imports	911	932	1,084			
Listing	787	787	997			
Nonlisting	124	145	87			
Calculators:						
Exports, total	193	190	172	[2]372	[2]386	[2]516
Printing	157	140	115	316	337	464
Nonprinting	36	50	57	56	49	52
Imports, total	2,824	3,981	5,464	[2]7,946	[2]6,388	[2]7,186
Printing	787	1,382	2,454	4,546	3,990	4,092
Nonprinting	2,037	2,599	3,010	3,400	2,398	3,094
Cash registers:						
Exports	94	115	81	66	54	51
Imports	494	624	1,169	1,018	936	867

[1]Adding machines combined with calculators for these years.
[2]Includes adding machines.

$516,000 in 1958, or about half of 1 percent of the estimated world total. Imports during the period increased rapidly, from $3.7 million to $7.2 million. French possessions and former colonies took about 25 percent of these exports in 1957, Europe about 28 percent.

France's trade in cash registers is much smaller but shows a similar trend. Exports are negligible and have been declining; imports have almost doubled since 1953, amounting to $867,000 in 1958. About 90 percent of the 1958 exports of cash registers went to French possessions.

Recent sources indicate that there are six firms producing these products in France. Three are subsidiaries of major U.S. firms.

Denmark

Denmark's production of adding and calculating machines rose 50 percent from 1953 to 1957 but still amounted to less than a fourth of imports, and was also less than exports. Denmark's strategic geographical location, which results in use of its ports and cities as distribution and exchange centers, explains this apparent imbalance between the country's production, import, and export statistics. For example, production of adding and calculating machines in 1953 totaled $180,000; exports $233,000; and imports $1 million. Europe took about 60 percent of Denmark's exports of these products in 1957, the United Kingdom leading with 19 percent of the total. France and the United States each accounted for about 9 percent. Most of Denmark's imports of these products were supplied by Sweden, Germany, Italy, and the United States.

Denmark's production of cash registers is limited, amounting to only $199,000 in 1957. Both imports and exports are negligible.

Only two firms are currently reported to be producing these products in Denmark, and they also make other types of business machines, chiefly duplicators and dictating machines.

Denmark: Production and Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-57

(Value in thousands of dollars)

Item	1953	1954	1955	1956	1957
Adding and calculating Machines:					
Production	180	293	261	206	284
Exports	233	352	311	215	342
Imports	1,014	1,360	1,227	1,012	1,351
Cash registers:					
Production	247	183	141	177	199
Exports	33	26	13	7	0.3
Imports	8	.....	22	17	19

Belgium

Though not a producing country, Belgium has been a consistent exporter of adding and calculating machines and cash registers. Like Denmark, Belgium enjoys a strategic geographical location, its major ports functioning as distribution and exchange centers for Central Europe. Consequently, Belgian trade statistics show an unusual volume for so small a country and an apparent imbalance of exports and imports. Belgian exports of these products totaled $166,000 in 1953 and increased slightly to $193,000 in 1958. The Belgian Congo imported 26 percent of the 1958 total, Europe nearly 53 percent. France and West Germany took 23 percent and 18 percent, respectively.

Belgium is a large importer of these products. Imports in 1953 totaled $3.8 million and in 1958 $4.0 million--more than 20 times export volume. The United States, West Germany, and Italy were the principal suppliers.

Belgium: Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953	1954	1955	1956	1957	1958
Calculating and bookkeeping machines and cash registers:						
Exports	166	98	196	186	238	193
Imports	3,850	4,327	3,986	3,885	4,225	4,015

Canada

Canada is a major producer of these products, practically all output coming from assembly plants operated by several of the large U.S. firms. Though only a small proportion of Canadian production is exported, the volume is sufficient to rank Canada next to last among the 12 leading exporters.

Canada's exports of adding machines declined from $337,000 in 1953 to $171,000 in 1958. Exports of calculating and bookkeeping machines and parts--which are combined in the statistics--have tripled since 1953, increasing from $3.4 million to $10.8 million in 1958. The United States is Canada's best market for exports of calculating and adding machines, taking 38 and 68 percent, respectively, in 1958.

There is no record of exports of cash registers from Canada. Large quantities of parts for assembly of cash registers are imported, chiefly from the United States.

Canada: Production and Foreign Trade in Adding and Calculating Machines and Cash Registers, 1953-58

(Value in thousands of dollars)

Item	1953		1954		1955	
	Units	Value	Units	Value	Units	Value
Adding machines:						
Production	17,044	2,190	14,311	2,147	19,057	2,868
Exports	111	337	42	251	82	308
Imports	6,643	1,427	6,415	1,567	9,662	2,326
Calculating and bookkeeping machines and parts:						
Exports	1,394	3,378	1,332	3,562	2,703	4,704
Imports	9,889	8,433	8,135	8,811	9,559	10,746
Cash registers:						
Imports, complete machines	.....	379	.....	819	.....	577
Imports, parts for manufacturing	.....	1,520	.....	1,873	.....	1,692

Item	1956		1957		1958	
	Units	Value	Units	Value	Units	Value
Adding machines:						
Production	18,700	2,821	n.a.	n.a.	n.a.	n.a.
Exports	227	585	239	297	220	171
Imports	9,986	2,578	11,052	2,447	12,030	2,248
Calculating and bookkeeping machines and parts:						
Exports	2,882	7,335	2,600	10,387	2,867	10,830
Imports	11,900	15,063	12,196	17,280	10,666	14,058
Cash registers:						
Imports, complete machines	.....	785	.....	729	.....	854
Imports, parts for manufacturing	.....	1,820	.....	1,946	.....	1,996

n.a.—Not available.

Other Countries

The 12 nations heretofore discussed account for practically all of the world trade in adding and calculating machines and cash registers. Czechoslovakia and East Germany also produce these products for export; though reliable data on the extent of their trade is not currently available, it is known that both countries export some machines to most of Europe and to Latin America and the United States.

Recently, several other countries have begun to produce or assemble these products on a limited scale for local markets: Union of South Africa, Spain, Argentina, Brazil, Colombia, Japan, and Mexico. Subsidiaries of foreign firms—United States or European—account for most of the production in these countries.

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